

DT05 Rec'd PCT/PTO 26 JAN 2005

Attorney's Docket No. 12505-036

#4/A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

United States Patent Application No. \_\_\_\_\_  
National Stage Application of PCT/US03/23426

Title: Microreactor with Controllable Pressure and  
Temperature for In Situ Material  
Investigations

Inventor: McKelvy et al.

Int'l Filing Date: July 25, 2003

U.S. Filing Date: January 26, 2005

Group Art Unit: Unassigned

Examiner: Unassigned

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRELIMINARY AMENDMENT**

Please enter the following preliminary amendment in the above-referenced application:

**In the Specification**

Please replace paragraphs [0001], [0025] and [0026] with the following corresponding replacement paragraphs, which are marked to show the changes relative to the previous version of the paragraphs:

[0001] This application is the U.S. national stage of PCT Application No. PCT/US03/23426, titled, "Microreactor with Controllable Pressure and Temperature for In Situ Material Investigations," which is based on and claims the priority and benefit of U.S. Provisional Patent Application No. 60/398,689 filed on July 26, 2002, both of which are is incorporated herein in their entirety by this reference.

[0025] Referring to FIG. 4, a thermocouple well 62 extends from the exterior of the core body 14 to a point within the core body very near the reaction chamber 37 (e.g., within a millimeter of it) but without penetrating into the chamber 37. The thermocouple well 62 44 is sized to receive a thermocouple (not shown) for measuring the temperature of the core body 14